

2018 Real-Time and Embedded Systems and Technologies (RTEST 2018)

**Tehran, Iran
9-10 May 2018**



**IEEE Catalog Number: CFP18ZUZ-POD
ISBN: 978-1-5386-1476-1**

**Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP18ZUZ-POD
ISBN (Print-On-Demand):	978-1-5386-1476-1
ISBN (Online):	978-1-5386-1475-4

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

Fast Write Operations in Non-Volatile Memories Using Latency Masking	1
DrAx: An Automatic Approach to Designing More Precise and Energy-Efficient Approximate Adders	8
PCM-Oriented Cache Management Strategies for Solid-State Disks	16
Optimizing Embedded Neural Networks Based on Saturated States	24
Towards Side Channel Secure Cyber-Physical Systems	31
Objective Function: A Key Contributor in Internet of Things Primitive Properties	39
Resource Management and Control in Virtualized SDN Networks	47
A Time-Predictable Fog-Integrated Cloud Framework: One Step Forward in the Deployment of a Smart Factory	54
A Framework for Reliable and Ubiquitous Inference in Wireless Sensor Network	63
Delayed LMS filters suppressing the RFI in cosmic rays radio detection	71
Performance Adaptation of Real-Time Control Tasks by Dynamic Scheduling: A Self-Triggered Control Approach	80
Probabilistic Analysis of Self-Stabilizing Systems: A Case Study on a Mutual Exclusion Algorithm.....	88
Real-time Hardware-in-the-loop Test for a Small Upper Stage Embedded Control System	96
A Classifier-based Test Oracle for Embedded Software	104